

What is claimed is:

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1. A method for sizing a database management system, the method comprising the steps of:
providing one or more percent hardware utilization limits;
obtaining throughput workload requirements; and
calculating the hardware resources needed to satisfy the workload requirements while remaining within the percent hardware utilization limits.

2. A method as recited in claim 1, the method further comprising the steps of:
accepting user entered changes to the percent hardware utilization limits;
recalculating the required hardware resources in order to remain within said percent hardware utilization limits; and
outputting the required hardware resources to the human user in a format to advise the human user.

3. A method as recited in claim 1, the method further comprising the steps of:
obtaining database requirements; and
calculating the hardware resources needed to satisfy the database requirements while remaining within the percent hardware utilization limits.

4. A method as recited in claim 4, the method further comprising the steps of:
accepting user entered changes to the percent hardware utilization limits;

1 recalculating the required hardware resources in order to remain within
2 said percent hardware utilization limits; and
3 outputting the required hardware resources to the human user in a format to
4 advise the human user.

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5. A method as recited in claim 4, wherein the throughput workload
2 requirement includes a transactions per second requirement.

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4 6. A method as recited in claim 5, wherein the calculating and
5 recalculating steps include calculating the hardware resources needed as a function of
6 the transactions per second.

1 7. A method as recited in claim 4, wherein said hardware resource
2 requirements include a number of processors.

1 8. A method as recited in claim 7, wherein said calculating and
2 recalculating steps include calculating said number of processors as a function of the
3 transactions per second.

1 9. A method as recited in claim 4, wherein the percent hardware
2 utilization limits include percent processor utilization and said accepting step includes
3 accepting changes to said processor utilization and said calculation and recalculation
4 steps includes calculating said hardware requirements within said processor utilization
5 limits and include changing said number of processors required when necessary to
6 remain within said processor utilization limits.

1 10. A method as recited in claim 9, wherein said processor utilization
2 limits include upper utilization limits to prevent over utilizing said processors and said
3 calculating and recalculating steps include calculating said number of processors
4 needed keeping below said upper limit to prevent over utilization of said processors.

1 11. A method as recited in claim 10, wherein said processor utilization
2 limits include lower utilization limits to prevent under utilizing said processors.

1 12. A method as recited in claim 11, wherein said calculating and
2 recalculating steps include calculating said number of processors needed keeping
3 above said lower limit to prevent under utilization of said processors.

1 13. A method as recited in claim 10, wherein said percent hardware
2 utilization limits include percent network interface card utilization and said
3 calculating and recalculating steps include calculating said hardware requirements
4 within said network interface card utilization limits and include changing said number
5 of network interface cards required when necessary to remain within said network
6 interface card utilization limits.

1 14. A method as recited in claim 13, wherein said network interface card
2 utilization limits include lower utilization limits to prevent under utilizing said
3 network interface cards and said calculating and recalculating steps include
4 calculating said number of network interface cards needed keeping above said lower
5 limit to prevent under utilization of said network interface cards.

1 15. A method as recited in claim 14, wherein said network interface card
2 utilization limits include upper utilization limits to prevent over utilizing said network
3 interface cards and said calculating and recalculating steps include calculating said
4 number of network interface cards needed keeping below said upper limit to prevent
5 over utilization of said network interface cards.

1 16. A computerized method for calculating hardware requirements for a
2 database management system computer comprising the steps of:
3 establishing default values for hardware utilization limits;
4 initializing said hardware utilization limits to said default values;
5 obtaining a workload requirement from said human user; and
6 calculating said hardware requirements as a function of said workload
7 requirement while remaining within said hardware utilization limits.

1 17. A computerized method as recited in claim 16, the method further
2 comprising the steps of:
3 obtaining new hardware utilization limits from said human user;
4 recalculating said hardware requirements while remaining within said
5 hardware utilization limits; and
6 displaying hardware requirements in a format to advise the user of the
7 required hardware for the user entered workload.

1 18. A computerized as recited in claim 17, wherein said hardware
2 requirements include discrete numbers of hardware components.

1 19. A computerized method as recited in claim 18, wherein and said
2 calculating and recalculating steps include calculating said number of hardware
3 components.

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